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IN THE CLAIMS:

Please amend the claims as follows:

Claims 1 through 16 (Canceled)

17. (Currently amended) A method of determining therapeutic activity and/or possible side-effects of a medicament, said method comprising:

introducing a medicament to an organism; and

determining a relative ratio of <u>a</u> first nucleic acid and/or gene product thereof of an endosymbiont cellular organelle and any second nucleic acid and/or gene product thereof of said organism in a sample obtained from said organism; and

determining whether the relative ratio is indicative of a therapeutic activity or a side-effect of the medicament.

- 18. (Currently amended) The method according to claim 17, wherein said introducing said medicament comprises introducing said medicament for at least three months.
- 19. (Previously presented) The method according to claim 17, wherein said medicament is used for treatment of a chronic disease.
- 20. (Previously presented) The method according to claim 17, wherein said introducing a medicament to said organism comprises introducing said medicament to an organism free from side-effects at a first time said medicament is introduced to said organism.
- 21. (Previously presented) The method according to claim 17, wherein said therapeutic activity comprises a therapeutic activity against an HIV-related disease and/or a tumor-related disease.

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- 22. (Currently amended) The method according to claim 17, wherein said medicament comprises a nucleoside and/or nucleotide analogue.
- 23. (Currently amended) The method according to claim 22, wherein said nucleoside and/or nucleotide analogue comprises is selected from the group consisting of fludarabine, mercaptopurine, tioguanine, cytarabine, flurouracil, and/or gemcyatbine, and mixtures thereof.
- 24. (Currently amended) The method according to claim 17, wherein said medicament comprises AZT, ddI, ddC, d4T, 3TC and/or tenofofir.
- 25. (Previously presented) The method according to claim 17, wherein said determining comprises determining said relative ratio prior to said introducing said medicament.

Claims 26 through 46 (Canceled)

- 47. (Previously presented) The method according to claim 17, wherein said relative ratio is determined in the same assay.
- 48. (Previously presented) The method according to claim 47, further comprising amplifying said first nucleic acid and/or gene product thereof and said second nucleic acid and/or gene product thereof in the same assay.
- 49. (Previously presented) The method according to claim 47, wherein said relative ratio is determined directly by dividing an amount of said first nucleic acid and/or gene product by an amount of said second nucleic acid and/or gene product.

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- 50. (Previously presented) The method according to claim 47, wherein said relative ratio is determined directly by dividing an amount of said second nucleic acid and/or gene product by an amount of said first nucleic acid and/or gene product.
- 51. (Previously presented) The method according to claim 47, wherein said relative ratio is determined by comparison with a reference curve.
- 52. (Currently amended) The method according to claim 47, wherein said first nucleic acid and/or gene product thereof and said second nucleic acid and/or gene product thereof are obtained from a peripheral blood mononuclear cell and /or fibroblast.